

Federal Fiscal Year 2002
Nonpoint Source Control Program Annual Report

Prepared By The
Water Resources Assistance Program

South Dakota
Department of Environment
And Natural Resources

Joe Foss Building
Pierre, South Dakota 57501

November 2002

Federal Fiscal Year 2002

Nonpoint Source Control Program Annual Report

South Dakota

November 2002

NPS Program History

In 1987 Congress acted on the need to expand the nation's pollution control efforts when they included provisions to control nonpoint source pollution in Section 319 of the reauthorized Clean Water Act. Nonpoint source pollution as (NPS) defined in the Act, is pollution caused by diffuse sources that are not regulated as point sources. In more basic terms, NPS pollution can be a variety of contaminants (e.g., sediments, nutrients, etc.) that are delivered to surface waters by way of runoff or leached downward into groundwater. Some common sources of NPS pollution include run off from urban streets and parking lots, construction sites, and agricultural lands.

Given the size of the agricultural industry in South Dakota, agriculture and its associated activities have been the primary focus of the state's NPS program. Since 1988, a majority of the state's federal funding for NPS control has been directed toward locally sponsored projects promoting voluntary NPS pollution control on agricultural lands. These funds have generally been used to implement various information and education activities and/or provide the necessary financial and technical assistance to landowners implementing best management practices (BMP) on their land. Section 319 funding has also been used to support local initiatives to evaluate water quality conditions and determine sources and causes of NPS pollution within priority watersheds.

Since the reauthorization of the Clean Water Act in 1987, the South Dakota NPS Pollution Management Program has used Section 319 and 604(b) funding to support over 150 nonpoint source projects throughout the state. While the size, target audience, and structure of the projects have varied significantly, they all share the same basic objectives. These common objectives are: 1) increase public awareness of NPS pollution issues; 2) identify, quantify and locate sources of nonpoint source impairment; 3) reduce/prevent the delivery of NPS pollutants to waters of the state with emphasis on meeting targets established through Total Maximum Daily Loads (TMDLs); and 4) disseminate information on effective solutions to NPS pollution where it is threatening or impairing uses.

State and local projects supported with Section 319 funding have been of three different types. These project types or categories are: 1) assessment/development phase projects; 2) educational projects; and 3) watershed implementation projects. Although most projects clearly fit into one of these categories, there have been several projects that included components from all three categories. A portion of the Section 319 funds awarded to the state has also been used to assess major aquifers in the state as well as promote and implement practices that prevent groundwater contamination.

The primary purposes of assessment/development phase projects are to identify beneficial use impairments or threats to specific water bodies and determine the extent to which those threats or

impairments are due to NPS pollution. Highest priority is given to water bodies identified on the 303(d) list of impaired water bodies. TMDLs are prepared for the 303(d) listed water bodies as a part of the assessment project. Work activities during a development phase project generally involve an inventory of existing data and information and supplemental monitoring, as needed, to allow an accurate assessment of the watershed. Through these efforts the local project sponsors are able to: 1) determine the extent to which beneficial uses are being impaired; 2) identify specific sources and causes of the impairments; 3) establish preliminary pollutant reduction goals or TMDL endpoints; and 4) identify practices or management measures needed to reduce the pollutant sources and restore or maintain the beneficial uses of the water body. Assessment/development phase projects are generally one to three years in length.

Educational projects, as the name implies, are designed to disseminate information on various NPS pollution issues, ranging from specific sources or causes of NPS pollution to management solutions that can be used to reduce NPS pollution. Educational tools typically used by the sponsoring entities include brochures, all media (TV, radio, newspaper, etc.), workshops, “how to” manuals, tours, exhibits, and demonstrations. These projects are generally one to five years in length.

The watershed projects are the most comprehensive projects implemented through the NPS Pollution Management Program. These projects are typically the most long-term in nature and designed to address documented NPS pollution impacts and beneficial use impairments within approved priority watersheds. Common objectives for a watershed project are to: 1) protect and/or restore impaired beneficial uses through the promotion and voluntary implementation of best management practices that reduce/prevent documented NPS pollution loadings; 2) disseminate information on local NPS pollution concerns and effective solutions to those concerns; and 3) evaluate the projects’ progress toward identified use attainment or NPS pollutant reduction goals. Watershed projects are generally four to ten years in length, depending on the size of the watershed and extent of NPS pollution impacts.

The South Dakota Nonpoint Source Pollution Management Program will continue to be a voluntary program, primarily directed toward locally sponsored initiatives that strive to reduce/prevent NPS pollution impacts to the beneficial uses of the state’s water resources. As a result, successful delivery of the NPS Program must include coordination with many local/state/federal agencies as well as private organizations. Through this coordination and formation of strong partnerships, the necessary financial and technical resources will be available to local sponsors to meet their goals and demonstrate that nonpoint source pollution control/prevention can be accomplished effectively and voluntarily. Ultimately, within South Dakota, the success of any NPS pollution control project will be dependent on the ability of the local sponsors and their partners to demonstrate to land owners and managers and the general public that NPS pollution control and water quality improvement practices can co-exist with their businesses.

NPS Management Plan

EPA required all states to “upgrade” their nonpoint source management plans to address nine key federally mandated elements in order to access Section 319 “incremental” grant funds. South Dakota’s revised plan was approved by EPA on March 30, 2000. This plan expands on earlier editions and continues to achieve improved water quality through voluntary actions developed in partnership with the landowners and land managers. Primary tools include technical and financial assistance as well as provision of better information and education. One of the keystones of this program is the Nonpoint Source Task Force composed of about sixty agencies, organizations and tribal representatives who coordinate diverse views and resources to make a workable program which benefits the landowners as well as the environment. The management plan is available upon request or can be accessed at the DENR web site www.state.sd.us/denr/watershed.

The management plan envisioned a broad assessment of the state’s waters and sorting them into three “tiers” of priority for actions. That approach has been supplanted by a program of assessment and implementation driven by the 303(d) listing of impaired water bodies and TMDLs to address the impairments. Since the 303(d) list of impaired waters was expanded in 1998, considerable additional effort has gone into developing and implementing work plans to achieve TMDLs for all of the impaired waters over 13 years. TMDL assessment and implementation project priority has superceded other priority methodologies previously used. The 303(d) list was revised in 2002 to reflect recent monitoring and assessment data. The 303(d) list identified 83 water bodies impaired by nonpoint sources which need assessments and TMDLs. As of September 30, 2002, 24 nonpoint source TMDLs had been completed, three water bodies were determined not to be impaired. Progress in implementing the management plan is for the most part ahead of schedule. The NPS program had committed to building to an ongoing program that initiates and completes 11 assessments per year and initiates and completes 5 implementation projects per year. That effort is ahead of schedule. Tasks 3-6 and 12-16 were superceded by the 303(d) / TMDL priority approach. Task 11, the sorting and ranking of streams based on ecoregions, has been suspended because of a lack of resources and priority. Task 28, the post-project assessments, is behind schedule also due to a lack of resources and priority. All other tasks are on schedule, have been completed or, in some cases, have exceeded their planned outputs.

319 Projects Initiated

The following projects received 319 grant awards and were initiated during this reporting period:

STAFF & SUPPORT

\$ 650,000.00

319 PROJECT GRANT

\$3,142,900.00

<u>ASSESSMENTS PROJECTS</u>		<u>319 Amount</u>	<u>Type</u>
	Lake Norden/Lake Albert	\$60,200	Base
	Richmond Lake	\$55,000	Base
	Burke Lake	\$36,000	Base
	Keya Paha River/Rahn Lake	\$82,000	Base
	Little White River	\$50,500	Base
<u>IMPLEMENTATION PROJECTS</u>			
	Cochrane & Oliver	\$75,000	Incremental
	Cottonwood Lake/Lake Louise	\$471,589	Incremental
	Phosphorus & Soil Research	\$111,917	Base
	Lakes Rosehill & Jones	\$272,000	Base
	Elm Lake	\$387,000	Base
	Middle Big Sioux Animal Waste (Tentative)	\$1,201,194	Incremental
	Firesteel Creek/Lake Mitchell	\$340,500	Incremental
	Total	\$3,142,900	

Active 319 Projects

In addition to the above projects, the following projects were open and active during this reporting period:

Bad River Basin Projects	Bad River National Watershed Monitoring Bad River Phase III Hayes and Waggoner Lakes TMDL
Belle Fourche River Basin Projects	Bear Butte Creek Riparian Demonstration Belle Fourche River Assessment
Big Sioux River Basin Projects	Bachelor Creek Implementation Clear Lake Implementation Central Big Sioux TMDL Enemy Swim Lake Implementation Kingsbury County Lakes Assessment Lake Poinsett Watershed Lakes Herman/Madison/Brant Implementation North Central Big Sioux / Oakwood Lake TMDL Upper Big Sioux River Implementation Upper Big Sioux River Watershed Wall Lake Post Assessment
Cheyenne River Basin Projects	Lower Rapid Creek TMDL Rapid City Stormwater
Grand River Basin Projects	None
James River Basin Projects	Firesteel Creek Implementation Lake Redfield Restoration Moccasin Creek TMDL Jones & Rosehill Lakes TMDL Loyalton and Cresbard Lakes TMDL Lake Faulkton Implementation White Lake Dam TMDL South Central Lakes TMDL
Minnesota River Basin Projects	Big Stone Lake/Little Minnesota Cochrane & Oliver Lakes Implementation Lake Hendricks Watershed
Missouri River Basin Projects	Medicine Creek Assessment
Statewide / Regional Projects	Animal Waste Team IV Buffer Planning & Technical Assistance Bootstraps Grassland Management Technical Assistance Ground Water Monitoring Network Nonpoint Source Information / Education 1996 Statewide Lakes Assessment

319 Projects Closed

The following 319 projects have been closed. Final reports for these projects have been filed with EPA and are also available through the South Dakota Library Network.

Bad River Basin Projects	Bad River Phase II Upper Bad River Demonstration
Belle Fourche River Basin Projects	None
Big Sioux River Basin Projects	Bachelor Creek Assessment Big Sioux Well Head Protection Blue Dog Lake Assessment Lake Campbell Watershed Restoration Lake Kampeska Watershed Pickerel Lake Protection Wall Lake
Cheyenne River Basin Projects	Foster Creek Riparian Demonstration - Stanley Co. Piedmont Valley Assessment
Grand River Basin Projects	Shadehill Lake Protection Staffing & Support
James River Basin Projects	Lake Byron Watershed Clear Lake Assessment - Marshall Co. Cottonwood & Louise TMDL Foster Creek Riparian Demonstration - Beadle Co. Lake Mitchell Watershed Assessment Mina Lake Water Quality Assessment Ravine Lake Watershed Richmond Lake Watershed
Minnesota River Basin Projects	Big Stone Lake Big Stone Lake Restoration II Cochrane & Oliver TMDL Lake Cochrane Protection
Missouri River Basin Projects	Burke Lake Restoration

319 Projects Closed (Continued)

Vermillion River Basin Projects	Swan Lake Restoration
Statewide / Regional Projects	Abandoned Well Sealing Animal Waste Management I Animal Waste Management II Animal Nutrient Management III Animal Waste Team (Buffer salesmen) Coordinated Resource Management I Coordinated Resource Management II East River Area Riparian Demonstration East River Riparian Demonstration II East River Riparian Grazing I Nitrogen & Pesticides in Ground Water Nonpoint Source Information & Education 1994 Nonpoint Source Information / Education 1989 Rainfall Simulator Riparian Grazing Workshop South Dakota Association of Conservation Districts South Dakota Lake Protection Statewide Lake Assessment

604(b) Grant

The 604(b) grant was amended during this reporting period and the amount for the amended FY2002 604(b) grant was \$387,161. Of this total, \$331,161 was obligated for five water quality development projects. One existing project, the Bear Butte Creek TMDL Assessment, has completed its financial payments and the final report is currently being written.

Approximately \$60,000 was available to support department staff with implementation of the 604(b) program and assist with Total Maximum Daily Load development. These efforts included developing grant applications, workplans, projects, and contracts, and providing for project oversight, meetings, and voucher processing. These funds require no match and can be used on short notice to initiate activities in support of the nonpoint source control program.

604(b) Projects Initiated

The following 604(b) projects were initiated during this reporting period:

PROJECT	CONTRACTUAL AWARD
Turkey Ridge Creek Watershed TMDL Assessment	\$ 85,000
Digitize Soils Maps for South Dakota *	\$ 150,000
Lower Big Sioux TMDL Assessment	\$ 50,000

* This item has since been rebudgeted to to Section 106 funding

Active 604(b) Projects

These 604(b) projects were active during this reporting period:

PROJECT	CONTRACTUAL AWARD
Wylie Pond/Moccasin Creek Watershed TMDL	\$ 23,013
Water Quality Database Management Support	\$ 69,148
Administration	\$ 60,000

Closed 604(b) Projects

The following 604(b) projects have been completed and are closed:

Bad River Basin	Bad River Phase IA Bad River Phase IB
Belle Fourche River Basin	Streambank Erosion Assessment-Upper Whitewood Creek Whitewood Creek Streambank Assessment Project Whitewood Creek Watershed Project Planning
Big Sioux River Basin	Big Sioux Aquifer Protection Project Big Sioux Aquifer Study Big Sioux River Bank Stabilization Demonstration Project Big Sioux River Riparian Assessment (Moody/Minnehaha) Pelican Lake Control Structure Feasibility Lake Alvin/Nine Mile Creek TMDL Lakes Herman, Madison, Brandt Project Planning Lake Poinsett Project Planning and Design Upper Big Sioux Watershed AGNPS
Cheyenne River Basin Projects	Develop NPS BMPs Western Pennington Co. Drainage Dist. Galena Fire Project Rapid Creek and Aquifer Assessment Project Rapid Creek NPS Assessment Project Rapid Creek Stormwater Impact Prioritization
Grand River Basin	Grand River Watershed TMDL

Closed 604(b) Projects (Continued)

James River Basin	Broadland Creek Watershed Study Firesteel Creek/Lake Mitchell WQ Needs Assessment - Landowner Survey Lake Faulkton Assessment Project Lake Louise Water Quality Monitoring Mina Lake Water Quality Project Ravine Lake Diagnostic/Feasibility Study Turtle Creek/Lake Redfield Landowner Survey
Minnesota River Basin	Blue Dog Lake/Enemy Swim Septic Leachate Survey Lake Cochrane/Oliver TMDL Fish Lake Water Level and Quality Study Lake Hendricks Restoration Assessment Lake Traverse/Little Minnesota River Land Inventory
Missouri River Basin	Burke Lake Diagnostic/Feasibility Study Lake Andes Watershed Treatment Project Platte Lake Planning Randall RC&D Implementation Planning
Moreau River Basin	None
Niobrara River Basin	None
Red River Basin	None
Vermillion River Basin	Vermillion River Basin Watershed Planning West Yankton Sanitary Sewer Survey
White River Basin	White River Preservation Project White River Watershed Data Collection Project
Statewide	Chemical Containment Demonstrate Slash Pile Use Control Erosion on Fragile Soils Detention Cell Demonstration Project East River Riparian Demonstration Project Forestry BMP Pamphlet Groundwater Protection Project Livestock Waste Management Handbook Local WQ Planning Through Hydrologic Unit Planning Pesticide and Fertilizer Groundwater Study Pesticide and Nitrogen Program Riparian Area Forestry Project Stockgrowers Speaker Water Quality Study of SD Glacial Lakes and Wetlands Wetland Assessment for the Nonpoint Source Program North Central RC&D HU Implementation

Section 104(b)(3) – Special Studies

During this reporting period a grant in the amount of \$200,000 was obtained from Section 104(b)(3) Special Studies for the Lower Big Sioux River TMDL Project (\$100,000 FY01 and \$100,000 FY02). The Water Resources Assistance Program is conducting a watershed assessment on the portion of the Lower Big Sioux River located in South Dakota. This border water TMDL assessment also involves the State of Iowa who received a similar grant from USEPA Region 7. The Iowa Department of Natural Resources will conduct the assessment for the Iowa portion of the Big Sioux River. The money received from both USEPA Regions will be used to develop a TMDL for the Lower Big Sioux River. This project will continue through FY2004.

Section 106 Grant

The Water Resources Assistance Program received funding from Section 106 in the amount of \$715,066 (Fiscal Year 2001 Grant). During this reporting period five watershed and TMDL assessments were initiated constituting \$380,216 in contractual awards. The remaining grant amount was used for statewide programmatic purposes needed in the development and implementation of future TMDLS. Statewide monitoring, equipment, and digitized soil maps for modeling purposes were part of the statewide contractual awards.

Project	Contract Amount
Spring Creek Assessment	\$127,311.00
Upper Rapid Creek Assessment	\$50,000.00
Lake Hanson Assessment	\$58,808.00
School and Bullhead Lake Assessment	\$79,772.00
Alice & Fish Lake Assessment	\$64,325.00
Statewide Lake Assessment '02	\$25,000.00
Statewide Lake Assessment '03	\$30,000.00
Equipment for Lower Big Sioux/Spring Creek	\$129,850.00
Digitize Soils	\$150,000.00
Total	\$715,066.00

GRTS

South Dakota entered 319(h) funded projects data into the EPA GRTS-Web database. This database contains detailed information about 319 (h) funded projects including funding, goals, tasks and status. For more information on accessing the GRTS system please contact DENR.

The department continued updating and maintaining the EPA system this past year. In April and May, the department entered mid-year evaluations. In June 2002, DENR staff received training information on overall use of GRTS-Web.

The department worked the month of October and November to enter year-end reports and FY 2002 project information. The year-end reports and FY2002 data was entered before the December 1 deadline. Region 8 granted until December 1, 2002 to bring the 2002 information up-to-date.

Staff & Support

During the reporting period, the Watershed Protection Program employed 15.5 full time equivalents including an office administrator, a secretary, thirteen environmental scientists, and a natural resources engineer and utilized portions of other department staff as needed. Some services were also provided under a consultant contract.

Goals of the staffing plan are to:

- Provide sufficient administrative and financial support for the watershed/nonpoint source pollution control program to create and maintain functional, well-managed projects, and sustain an effective statewide program.
- Develop and conduct watershed and site-specific assessments in priority areas for the preparation and implementation of TMDLs.
- Provide sufficient technical support for the watershed/nonpoint source pollution control program to create and maintain effective projects using state-of-the-art science and engineering.
- Provide staff to implement the information and education work plan and activities, and provide general information and education support to the program and project sponsors.
- Facilitate partnering and coordination among agencies and project sponsors in the development and implementation of nonpoint source pollution control projects.

Detailed information about the program is available in the program staff & support work plan.

During this reporting period the program participated with many groups and agencies. Staff routinely attended meetings of the South Dakota Association of Conservation Districts Board of

Directors, SD Board of Water and Natural Resources, SD Conservation Commission, USDA Technical Committee, SD Nonpoint Source Task Force and local conservation districts which sponsored or were considering sponsoring nonpoint source control projects. Staff also routinely met with agency staff from the US Army Corps of Engineers, Natural Resources Conservation Service, US Forest Service, Environmental Protection Agency, US Bureau of Reclamation, SD Department of Game, Fish and Parks, SD Department of Agriculture, and many other state and local governments and organizations including agricultural producer organizations.

Every active project listed in this report received staff assistance during this reporting period, often on at least a weekly basis. Staff initiated 19 contracts obligating \$2,356,750 and processed 244 federal funds payment requests totaling \$2,076,731.02. Staff also processed 49 state fund payment requests totaling \$391,675.03.

Training

DENR nonpoint source program staff routinely train watershed project staff hired by local project sponsors. This is usually one-on-one training as needed particularly at the start of new assessment and implementation projects. At the beginning of each 319 funded project, DENR staff meets with the local sponsor staff and reviews the Project Implementation Plan. The local staff is presented with a copy of the DENR Water Project Packet which is then reviewed with them. The packet contains information on record keeping, reporting vouchering, match documentation, EPA and DENR guidance and policy memorandums, etc. Any staff involved in monitoring activities also receives training in sample and data collection and a review of quality assurance procedures.

Training sessions on the Annualized Agricultural Non Point Source Pollution Model (AnnAGNPS) were held during the past year. During the week of November 5th, staff from Iowa, North Dakota, and South Dakota received training in Pierre by members of the program development staff from Mississippi. A second training session for coordinators and scientists in South Dakota was held in June of 2002. This session was conducted by South Dakota staff and covered the development of a standard operating procedure for completing the AnnAGNPS model on South Dakota watersheds.

Project Guidance & Oversight

Because DENR staff work closely with project sponsors throughout the process of identifying, assessing and abating nonpoint sources of pollution, the need for formal project oversight is reduced. Project staff are comfortable with calling DENR staff for advice and assistance when problems arise and DENR staff are in frequent communication with project staff and are in a position to assess progress. Even so, it is good to occasionally take an unbiased look at projects and procedures. Last year we initiated third party project reviews utilizing the services of Pat Kuck of the Enviromed consulting firm. Mr. Kuck's long service with NRCS and as a consultant to DENR gave him a unique position to evaluate project progress. During this reporting period he reviewed the Bootstraps Natural Resource Inventory, Medicine Creek Watershed Assessment, Jones Lake-Rosehill Lake Watershed Assessment, Blue Dog Lake Implementation, Enemy Swim Lake Implementation and Wonderland Drainage Basin Stormwater Runoff Structure

Demonstration projects. A detailed report of each was filed with DENR and EPA. In general, he found that the projects were well managed and achieving their goals. He did identify several issues that needed follow-up. The first was a problem of assuring that field office files were also duplicated in the central office and that data was readily accessible in both locations. He also identified a problem with approving closeout and final payment of assessments before the data gathered had been reviewed by DENR staff. This can result in the data gatherer being unavailable to address questions regarding the data. DENR will address these data management issues.

EPA and DENR staff also visited projects jointly during this reporting period and reviewed their operations both in the office and in the field. In July, the EPA project office and DENR staff collected samples and reviewed operations of the statewide lake sampling program and conducted a site inspection of the Clear Lake Restoration Project. In August, EPA administrators and DENR staff visited the Lake Poinsett and Clear Lake Projects and discussed program operations and strategies.

The Nonpoint Source Task Force also conducted onsite visits in August. They visited sites demonstrating various assessment techniques and Best Management Practices developed under the Medicine Creek Assessment and the Grasslands Management Technical Assistance projects.

Information and Education

The South Dakota NPS I & E Program has been operational for nearly 11 years. Since its inception, the program has relied primarily on community based partnerships to deliver NPS information and action opportunities to the state's residents. This approach has resulted in an outreach and information transfer mechanism that:

- is consistent with the Clean Water Action plan,
- addresses priorities identified in the South Dakota – EPA Performance Partnership Agreement,
- enjoys broad-based support from agricultural and environmental groups and governmental agencies, and
- is holistic and sustainable.

The DENR NPS Information and Education Program is implemented through the department's Water Resources Assistance Program.

Information transfer and education activities selected and undertaken through the I & E program are:

- based on local, state and national priorities,
- chosen to complement actions being completed by other resource management groups and agencies,
- designed to effectively reach an identified target audience, and
- part of a statewide NPS I & E Strategy adopted by the South Dakota Nonpoint Source Task Force.

The NPS priority areas addressed by the strategy are:

- animal feeding operations (AFO/CAFO),
- nutrient management, and
- TMDLs.

The Water Resources Assistance Program has maintained a web site since 1998 to provide ready access to water resources information and opportunities for involvement. The web site is located at: <http://www.state.sd.us/denr/DFTA/WRAP>

Nonpoint source information, reports and opportunities for involvement are located within the web site at: <http://www.state.sd.us/denr/DFTA/WatershedProtection/wpprg.htm>

Selected NPS I & E activities initiated, in production, or completed during FY 2002 to address the NPS priority follows. A comprehensive summary of the state's NPS I & E outreach activities is located in Appendix A of this report. Many of the products that resulted from the activities are available by visiting the Watershed Protection web site reference previously or the URLs listed in Appendix A.

Selected FY 2002 SD NPS Information and Education Activities and Products.

Activity/Product	Target Audience	Priority Areas	Comments
1996 I&E Grant	Farm's/Ranchers Urban Residents	AFO/CAFO Nutrient Management TMDLs	The grant workplan is complete. The final report was filed with EPA July 2002. A copy is available by visiting: www.state.sd.us/denr/DFTA/WatershedProtection/WQInfo
Video/CD Best Practices: Manure BMPs	Livestock Producers General Rural/Urban	AFO/CAFO Nutrient Management TMDLs	Practices producers can and are using to manage manure as a resource and prevent pollution are presented. The video is used at training sessions and public meetings. Segments aired as a series on <i>Today's Ag</i> during Jan. – Feb. 2001. The weekly TV program has 45,000 – 60,000 viewers.
Living With a Septic System	Homeowners Planning and Zoning	TMDLs Nutrient Management Ground Water	The video provides homeowners and public officials easily understood information about septic system installation and maintenance. Segments aired as a feature series on <i>Today's Ag</i> during Dec. 2001. Nearly 500 copies have been distributed.
SD Forest and Water Adventures	Middle and High School Students	Nutrient Management TMDLs	The CD was produced to make the educational modules previously produced in a touch screen format more readily available to the target user group. A copy has been provided to all SD middle school science teachers. Total copies distributed exceeds 1,200. Visit the Watershed Protection web site to play the CD online or order a copy.

Exhibits Managing Manure for Profit and the Environment	Livestock Producers General Agriculture	AFO/CAFO Nutrient Management	Exhibits at DakotaFest 1999 – 2000 were used as the unifying event for an interagency/industry partnership implementing the “Managing Manure for Profit & the Environment outreach strategy. Over 5,000 individuals visited the exhibit over the three- year period. The 2001 exhibit included the integration of the Core 4 conservation practices into manure management. The 2001 exhibit was used by US Sec. of Agriculture Ann Veneman and US Representative John Thune as the location for a news conference. A smaller version of the exhibit is used by project partners at ag commodity group meetings, fair, conventions and expositions.
Phosphorus-Based Nutrient Management	Livestock Producers General Agriculture	AFO/CAFO Nutrient Management	The display summarizes the elements for developing and implementing a phosphorus-based TMDL. The exhibit was set-up at the 2001 Phosphorus, Manure and Water Quality Conference and 2001 and 2002 SD Association of Conservation Districts Convention. Total attendance approximately 450.
Year of Clean Water	General Urban/Rural	TMDLs	Materials promoting involvement in the Year of Clean Water activities an National Water Monitoring Day were developed and used at 6 events. Total attendance over 400. Water quality monitoring kits developed for the event were provided to nearly 30 teachers as part of the promotion.

BMP Demonstration Managed Grazing	Livestock Producers Resource Managers	Nutrient Management TMDLs	The six managed grazing demonstration sites included in the Grassland Management and Planning Project workplan are established. Field days at the sites during 2001-2002 attended by approximately 450 producers and agency personnel. Articles about the project and sites were published in over 20 newspapers with a total circulation of over 60,000.
Publications	Livestock Producers	AFO/CAFO Nutrient Management TMDLs	<p>A series of five manure as a resource publications is in progress through an interagency/livestock industry partnership. Primary distribution is through extension and conservation offices and the DENR web site.</p> <p>Titles in the series and production status are:</p> <p><i>Straight Talk on Manure</i> – Published 2000. In third printing. Nearly 15,000 copies distributed.</p> <p>Calibrating Manure Spreader Application Rates – <i>Published 2002.</i></p> <p><i>Approximately 7,000 copies distributed.</i></p> <p>Sampling Manure for Nutrient Analysis – <i>In final review. Print fall 2002.</i></p> <p><i>Using the Results from a Manure Analysis</i> –Draft complete Print spring 2003.</p> <p><i>Developing a Comprehensive Nutrient Management Plan</i> – Outlined. Print summer 2003.</p>

Other Resources

While funds provided through the Environmental Protection Agency play an important role in nonpoint source control in South Dakota, the program also takes advantage of resources from many other sources, public and private. Of particular note this year are the new and vastly expanded Farm Bill programs. NRCS and FSA have made extensive efforts with the various conservation partners to make the resources of the new Farm Bill available to solve environmental problems. DENR has been involved in this process at all levels. As a result, many of the Farm Bill opportunities will be targeted to 303(d) listed water bodies and will fund Best Management Practices which help solve nonpoint source water pollution problems.

The "South Dakota Nonpoint Source Program Manual" lists many of the available sources of resources. A few are summarized here.

USDA - Natural Resources Conservation Service and Farm Service Agency

The United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) has replaced the Great Plains Conservation Program - however, there are still 92 active Great Plains Contracts in South Dakota that funded \$325,461 of conservation work in 2002.

EQIP Priority areas - The EQIP priority areas were eliminated by the FY 2002 Farm Bill so no funding was distributed to priority areas this year. All EQIP funds were distributed through a statewide sign-up. This amounted to funding 253 EQIP contracts for \$8,736,373. Twenty-three of the new EQIP contracts included Animal Waste Management Systems as part of the practices to be installed. Also, as part of EQIP in FY 2002 is the High Plains Aquifer Ground and Surface Water Protection program. This covers seven counties in south central South Dakota. This program funded 15 contracts for \$118,369.

The small watershed program funded two PL-566 projects in South Dakota in 2002. The projects were the Lower Little Minnesota River - Big Stone Lake, land treatment project in northeast South Dakota and the Fall River Water Users rural water system in southwestern South Dakota. The land treatment project was funded at \$18,000, and the rural water project was funded for \$155,000 in 2002.

The NRCS level of technical assistance will remain consistent with that of prior years. No major changes for staffing or funding are expected. Even though staffing will be maintained at current levels, technical assistance may be a problem due to mandated workload requirements and technical assistance questions being raised by OMB.

The Wetlands Reserve Program (WRP) provided \$1,135,293 in 2002 for both permanent and 30 year easements, which restored 1,845 acres of wetlands in South Dakota.

The Emergency Watershed Protection Program (EWP) floodplain easement program was not funded in FY 2002. However, the Emergency Watershed Program was used to provide \$200,000 for work on areas damaged by forest fires in the Black Hills.

The Conservation Reserve Program (CRP) has 1,431,095 active acres in FY 2002. These lands are put into permanent vegetative cover, which is very effective in reducing erosion and improving water quality. This figure includes 134,457 acres of Continuous Sign-up CRP. This portion of CRP provides protection of sensitive acres through the use of Best Management Practices (BMP) such as tree belts buffers strips and grassed waterways. These practices don't have to go through the bidding process to be eligible for the program. This program provided approximately \$57,902,087 to the state of South Dakota in FY 2002.

The Wildlife Habitat Incentives Program (WHIP) funded 52 contracts on 9,245 acres for \$392,864 in new contracts in 2002.

US Forest Service

Public notices and other notices of proposed US Forest Service actions and permits were reviewed and coordinated as necessary. Assistance was also provided to the Forest Service in assessing damage and in preparing prevention plans for potential water quality impacts in the aftermath of the Lookout Mountain and Jasper fires in the Black Hills. Coordination with the Forest Service on TMDL water bodies within the forest boundaries has been an ongoing process. The Forest Service also participated in the BMP evaluations discussed in the Information and Education section of this report.

South Dakota Water & Environment Fund

The Water Resources Assistance Program administers the Consolidated Water Facilities Construction program which provides state grants and low interest loans for projects on the State Water Facilities Plan. Structural and construction Best Management Practices like dredging, animal waste facilities and shoreline stabilization are eligible for cost share funds as part of a watershed restoration project. The program also administers a special appropriation from the department's environmental and natural resources fee fund which provides state funds for TMDL assessment projects. Awards for this reporting period were:

<u>Project</u>	<u>Amount</u>	<u>Source</u>
Lake Norden/Albert/St. John Assessment	\$29,000	Fee Fund
Marshall County Lakes Assessment	\$25,000	Fee Fund
Clear Lake Restoration	\$85,000	Consolidated
Lakes Cochrane/Oliver Restoration	\$20,000	Consolidated
Lakes Cottonwood/Louise Restoration	\$150,000	Consolidated
Lakes Jones/Rosehill Watershed Improvements	\$28,000	Consolidated
Bachelor Creek Restoration	\$85,000	Consolidated

SD Conservation Commission

The South Dakota Conservation Commission provides grants of state funds to conservation districts for implementation of Conservation Best Management Practices through their projects. In this reporting period, they awarded \$545,220 of which \$156,900 directly supported NPS projects. DENR staff coordinated with the Commission, participated in project grant application reviews and attended all Commission meetings.

319 Grant Match

Nonfederal match of 40% of project expenditures is required to match EPA 319 grants. South Dakota has a history of over matching 319 grants even though the state takes a very conservative approach to accumulating and approving nonfederal match. Since much of the match comes from construction and implementation of BMPs, most match occurs in the later years of the 319 grants. A summary of documented nonfederal match is displayed in Appendix B.

HIGHLIGHTS OF PROGRAM ACCOMPLISHMENTS

SOUTH DAKOTA LEADS NATION IN NO-TILL ACRE INCREASE

– According to a report published by the Conservation Technology Information Center, South Dakota has had an increase of approximately 10 percent in no-till acres across the state in the past two years.

“In 2000, one out of every five cropped acres in South Dakota was involved in no-till, in 2002, this has increased to one out of every four,” said Natural Resources Conservation Service State Agronomist Jeff Hemenway. “This roughly equates to an increase of one million, no-till acres in a two-year period.”

The total number of acres involved in no-till across South Dakota is 4,066,957. The greatest increase in no-till acres occurred in the east-central portion of the state, with Campbell, Walworth, Potter and Sully Counties experiencing a 50 percent increase of no-till acres in just the past two years. Overall, 30 percent of all cropland in South Dakota is involved in the no-till system.

“If you combine the conservation tillage practices applied in South Dakota, three out of every four acres cropped in the state are involved in residue management,” commented Hemenway.

WATER QUALITY IMPROVEMENTS - BAD RIVER

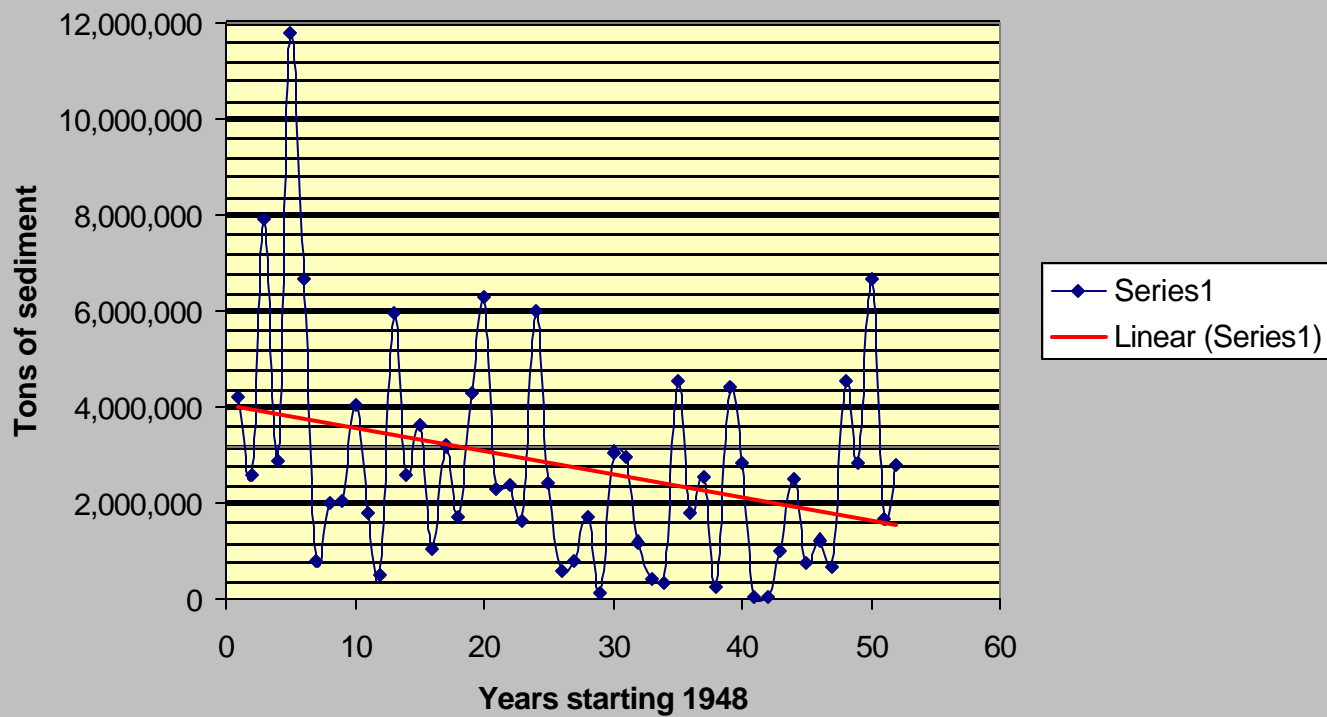
The Bad River watershed, 3,172 square miles that drain into the Missouri River at Ft. Pierre, South Dakota, consists primarily of highly erodible shallow and dense clays. The river does not support its assigned beneficial uses primarily because its sediment load has been an average of 3.25 million tons per year, which also severely impacts the Lake Sharpe impoundment of the Missouri River. The sport fishery in this reach of the Missouri River contributes about \$2.5 million annually to Pierre's economy, but only when it is not impaired by turbidity from the Bad River. When the Bad River is flowing, the value essentially goes to zero.

The Bad River's sediment load settles in the Missouri River near Pierre and Ft. Pierre and has significantly filled the channel. The result is increased flooding in the municipalities and surrounding area, and a consequent reduction in the water that the U.S. Army Corps of Engineers will release from the Oahe Reservoir during extremely cold periods. The loss of power generation during these times has an average annual value of \$12.5 million. Beyond economic value, however, is a greater concern; namely, that the loss of power generation during critical winter conditions may result in regional multi-state brown- or black-out conditions with consequent loss of life. If the sediment continues to accumulate, the Corps of Engineers predicts flow restrictions and subsequent power generation curtailments even under open channel flows.

The sediment deposition has also raised the water surface profile resulting in a \$35 Million buyout and relocation of homes in Pierre and Ft. Pierre.

A TMDL was developed which called for a reduction of 30% in Bad River sediment delivery to Lake Sharpe from the 3.25 Million tons per year measured by the USGS and Corps of Engineers. Data released by the Corps of Engineers in 2001 show that the Bad River currently delivers 1.95 Million tons of sediment per year. This is a 40% reduction, based on an average of USGS data from 1972 through 1997, and exceeds the TMDL goal. A linear regression of the same data base from 1948 through 2000 shows a 50% reduction in sediment delivery. The Bad River Project continues to implement BMPs in the lower watershed.

Bad River Sediment 1948 on



Appendix A – Information and Education Project Matrix

ACTIVITY	PRIMARY TARGET AUDIENCE	PRIORITY AREA	DENR PROGRAM INTERFACE	PRIMARY PROJECT PARTNERS	IMPLEMENTATION STATUS
Volunteer Watershed Activities Citizens Monitoring	General Urban/Rural	TMDL	Surface Water	SD Lakes & Streams Assoc. SD Discovery Center Local Organizations Water Development Districts	Ongoing. Financial assistance provided by 319 Grants through DENR and RGI Grants from EPA.
Storm drain Stenciling	Urban	TMDL Nutrient Management	Surface Water Source Water	SD Lakes & Streams Assoc. SD Discovery Center Local Organizations Water Development Districts	Data collected by monitoring groups is stored in a database maintained by the SD Lakes and Streams Association. The data base can be accessed by visiting:
Adopt*A*Stream	General Urban/Rural	TMDL Nutrient Management	Surface Water Source Water	SD Lakes & Streams Assoc. SD Discovery Center Local Organizations Water Development Districts	http://www.state.sd.us/denr/DFTA/WatershedProtection/Voluntary.htm
Coordinated Resource Management	Agriculture General Adult	TMDL Nutrient Management	All Media Programs	SDACD Midwest Mediation NRCS USFWS US Forest Service Northwest Area Foundation	Complete. Training and process manuals funded through 319 Grant from DENR and Northwest Area Foundation. Process manual, "Getting Results from Public Involvement" available from DENR.
Bootstraps	Farmers and Ranchers	TMDL Nutrient Management	Pollution Prevention Ag Waste Workgroup Surface Water Ground Water	NRCS RC&Ds SDSU Extension Service SD Dept. of Ag SDACD & Conservation Districts SD Grasslands Coalition	In progress. 319 funded assistance for Bootstraps groups and activities related to resource management plan development available through SDACD. Assistance for plan implementation available through 319 grant to SD Grassland Coalition for Grassland Management and Planning. For information about Bootstraps visit: http://www.sdconservation.org/local/boots1.html
Precision Farming	General Agriculture	TMDL Nutrient Management	Pollution Prevention Surface Water Source Water	SDSU Extension Service NRCS SDACD SD Dept. of Ag	Complete. Financial assistance provided through DENR P2 Program. Video was aired as a four part feature series on Today's Ag during Jan–Feb. 2001. Audience reached ranges from 45,000 – 60,000 viewers each week

No-till Farming	General Agriculture	TMDL Nutrient Management	Surface Water Source Water	SDSU Extension Service NRCS SDACD SD Dept. of Ag SD No-till Association Ducks Unlimited	<p>Complete. 319 funded project segment complete. Project continuing with funding from other sources.</p> <p>The results of a survey conducted to determine barriers to the adoption of no-till farming are available by visiting:</p> <p>Http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/Documents/No_till_Survey_Final_Report.pdf</p> <p>The <i>No-till Seeding Concepts</i> video produced is available from DENR.</p>
BMP Training Silviculture	Timber Industry Resource Managers	TMDL Riparian Areas Sediment	Surface Water Source Water	SD Forest Resource Association SD Dept. of Ag USFS	<p>Complete. Two workshops held summer 2000 were attended by nearly 100 industry/resource professionals. Field audits of BMPs installed at six timber sales were conducted summer 2001. A virtual tour of the audit sites is available at:</p> <p>http://www.hpcnet.org/timberaudit</p> <p>The results of the field audits and project final report are available at:</p> <p>http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/Documents/Publications.htm</p>
Onsite Wastewater Treatment Systems	Home Owners Planning and Zoning	TMDL Nutrient Management Ground Water	Ground Water Source Water Pollution Prevention	Black Hills RC&D SDSU Extension Service	<p>Complete. Attendance at two workshops spring 2000 totaled approximately 140. Nearly 200 information packets distributed. Nearly 500 copies of a video, <i>Living With a Septic System</i>, produced have been distributed. Segments of the video aired as a feature series on <i>Today's Ag</i> during December 2001. The program reaches 45,000 – 60,000 viewers each week. To view the video online visit:</p> <p>http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/P2.htm</p>

BMP Training Continued Urban Stormwater	Public Works Depts. Planning and Zoning Construction Industry	TMDL Sediment	Pollution Prevention Surface Water Source Water	American Public Works Assoc. Municipal League	In progress. Model prevention-based stormwater plans developed. Eighty stormwater managers attended a workshop held April 2002. A stormwater program requirements publication is in production.
Urban Sediment	Public Works Depts. Planning and Zoning Construction Industry	TMDL Sediment	Pollution Prevention Surface Water Source Water	American Public Works Assoc. Municipal League NRCS	Complete/Ongoing. Slide set developed through 319 Program. Workshop held spring 1996 with support from P2 Program. Workshop for construction industry is planned.
Riparian/Shoreline	General Agriculture Livestock Producers General Urban	TMDL Nutrient Management Sediment	Surface Water Source Water	SD Grassland Coalition NRCS RC&Ds SDSU Extension Service	Ongoing. Three field workshops on the use of vegetative methods held. East River Riparian Demonstration Project completed with financial support through 319 Program. <i>Shoreline Stabilization Guidelines</i> Manual produced by Upper Big Sioux and Lake Poinsett Watershed Projects. The manual is available online by visiting: http://www.state.sd.us/denr/DFTA/WatershedProtection/WQInfo.htm
Grassland Management and Planning	Livestock Producers Resource Managers	TMDL Nutrient Management Sediment	Surface Water	SD Grassland Coalition RC&Ds NRCS SDACD & Conservation Districts SDSU Extension Service SD Dept. of Ag SDGFP US Fish & Wildlife Service	In progress. Six grazing demonstration sites developed with support from the SD Soil and Water Conservation Fund, Bootstraps watershed projects and 319 funds. To learn about the sites visit: http://www.sdconservation.org/grassland/managing/gmd/index.html Technical assistance for planning and implementation of grazing systems added through 319 grant awarded SD Grassland Coalition spring 2001. Information transfer activities include field days, a web site and video. For grassland management information or to request technical assistance, visit : http://www.sdconservation.org/grassland/index.htm

Manure Management Training	Livestock Producers Resource Managers	TMDL AFO/CAFO Nutrient Management	Ag Waste Workgroup Surface Water	SDSU NRCS Ag Waste Workgroup	Ongoing. Training provided for AFO/CAFO facility operators through partnership with SDSU.
Videos	Livestock Producers General Rural/Urban	TMDL AFO/CAFO Nutrient Management	Ag Waste Workgroup Pollution Prevention Surface Water	SD Public Broadcasting SDACD & Conservation Districts NRCS RC&Ds SDSU Extension Service	<p><i>Protecting Our Water.</i> Produced and aired by SDPBS 1998. The video describes AFO/CAFO requirements in SD. Copies are available from DENR and at local libraries</p> <p><i>Best Practices: Manure Management</i> Produced 2000 by SDSU with funds from DENR 319 I & E Grant. Video presents manure management BMPs producers can and are using. The video is used at training sessions and informational meetings. Segments aired as a feature series on <i>Today's Ag</i> Jan. – Feb. 2001. Program attracts 45,000 – 60,000 viewers each week. To view the video online visit:</p> <p>http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/Documents/Publications.htm</p>
Phosphorus-Based Nutrient Management	Livestock Producers Resource Managers	TMDL AFO/CAFO Nutrient Management	Ag Waste Workgroup Pollution Prevention Source Water Surface Water Ground Water	SD Cattlemen's Association SDSU Extension Service SDACD NRCS RC&Ds	In Progress. Funding to identify BMP development needs provided to SD Cattlemen's Assoc. through DENR's 1999 P2 Grant from EPA. 319 funding to conduct field studies and transfer information needed to develop comprehensive nutrient management plans awarded to SDSU spring 2002.
Fecal Coliform Strain Identification	Livestock Producers Urban Publics Works Public Health General Rural/Urban	TMDL AFO/CAFO Nutrient Management	Ag Waste Work group Pollution Prevention Source Water Surface Water	SDSU Extension Service SD Cattlemen's Association SD Pork Producers NRCS	In Progress. The project is designed to select, field test and calibrate a fecal coliform strain identification diagnostic tool that will provide SD with a reliable, cost effective tool to better assess fecal sources and implement TMDLs for pathogens in surface water. Funding provided by DENR's P2 Program.

Manure Management Continued Exhibits	Livestock Producers General Adult/Urban	TMDL AFO/CAFO Nutrient Management	Ag Waste Workgroup Pollution Prevention Source Water Surface Water Ground Water	SDACD & Conservation Districts NRCS RC&Ds SDSU Extension Service SD Cattlemen's Association SD Pork Producers Watershed Projects SD Lakes and Streams Assoc.	Ongoing. Exhibits at DakotaFest 1999 – 2001 were the focus activity for the interagency <i>Managing Manure for Profit and the Environment Outreach Strategy</i> . Exhibits at ag commodity trade shows and local events ongoing. Funding provided by DENR 319 and P2 Programs and project partners.
Publications	Livestock Producers General Public/Urban	TMDL AFO/CAFO Nutrient Management	Ag Waste Workgroup Pollution Prevention Source Water Surface Water Ground Water	SDACD & Conservation Districts NRCS RC&Ds SDSU Extension Service SD Cattlemen's Association SD Pork Producers Utah Dept. of Ag & Food	<p>Ongoing. Development of publications is coordinated by an interagency and livestock industry nutrient management I & E workgroup. A five publication series built around manure as a resource theme is in production. As each publication in the series is complete, it is distributed through conservation district and extension offices and made available electronically at:</p> <p>http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/Documents/Publications.</p> <p>Publications in the series are:</p> <p><i>Straight Talk on Manure</i>. Produced 2000 with funds from DENR 319 and P2 Programs and EPA Region VIII 104(b) Grant to Utah Dept. of Ag and Food. Provides producers and public with “easily understood” information about the why and how of manure management and where to get technical assistance. In third printing. Nearly 15,000 copies distributed.</p> <p><i>Calibrating Manure Spreader Application Rates</i>. Produced 2002 with funds from DENR 319 and P2 Programs and project partners. Describes methods of calibrating solid and liquid manure application equipment. Approximately 7,000 copies distributed.</p>

Manure Management Publications Continued					<p><i>Sampling Manure for Nutrient Management</i> Scheduled for printing fall 2002. Produced with financial support from DENR 319 and P2 Program and project partners. Outlines procedures for collecting manure samples for nutrient analysis.</p> <p><i>Using the Results from a Manure Analysis.</i> Scheduled for printing spring 2003. Describes how to use the results of a manure nutrient analysis to determine fertilizer value.</p> <p><i>Developing a Comprehensive Nutrient Management Plan.</i> Printing scheduled summer 2003. Summarizes steps for developing a comprehensive nutrient management plan that includes manure.</p>
Manure Web Site	Livestock Producers General Agriculture General Adult/Urban	TMDL AFO/CAFO Nutrient Management	Ag Waste Workgroup Pollution Prevention Source Water Surface Water Ground Water	SDSU Extension Service SDACD & Conservation Districts NRCS RC&Ds	In Development by SDSU and Ag Waste Team. Financial support of Ag Waste Team provided by 319 Grant through DENR.
Interactive Display					
Touch Screen (Kiosk)	Middle & High School Students	TMDL Nutrient Management Forest BMPs	Surface Water Ground Water Source Water Pollution Prevention	SD Dept. of Ag Society of American Foresters SDSU Extension Service USFS SD Discovery Center & Aquarium	Development of watershed program segments and hardware provided through 319 I&E. One unit located at SD Discovery Center & Aquarium. Second unit available for loan.
Conversion of Touch Screen to CD (<i>South Dakota Forest and Water Adventures</i>)	Middle and High School Students	TMDL Nutrient Management Forest BMPs	Surface Water Ground Water Source Water Pollution Prevention	SD Dept. of Ag Society of American Foresters SDSU Extension Service USFS SDACD SD School of Mines & Technology	Complete. Funded by 319 Program and project partners. Over 1,200 copies distributed to middle schools and resource management organizations. To order or run the CD on line visit: http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/Documents/Publications
Region VIII NPS CD	Middle & High School Students	TMDL Nutrient Management	Surface Water Ground Water Source Water Pollution Prevention	Region VIII State NPS Programs Utah State University	Dropped. Funded by 319 grant from EPA to Utah State University. SD DENR participation in project dropped because of repeated production delays.

Water Festivals	Elementary School Students	TMDL Nutrient Management	All Media Programs	Water Development Districts Conservation Districts Watershed Projects Colleges/Universities SD Discovery Center	Complete/ongoing. Funds for initial development and coordination provided by 319 I&E Program. Festivals continuing under local leadership. Financial assistance encouraged through watershed project I&E component.
Wetlands	General Rural/Urban	TMDL Nutrient Management	Surface Water Ground Water Source Water	SDACD & Conservation Districts NRCS RC&Ds SDSU Extension Service SD Dept. of Ag	Ongoing. Local watershed projects and environmental groups encouraged to include wetlands activities in 319 project workplan I&E component or use funds available for wetlands from other sources. A statewide project through I&E Program is not planned at this time.
Project SAVE	Students – All Levels	General Environment TMDL Nutrient Management	Pollution Prevention All Media programs SD Geological Survey	SDSU SD Discovery Center Capital University Center	Complete/ongoing. Curriculum developed using state funds. Assistance for initial teacher training provided through DENR P2 Program. Offering program currently licensed to Capital University Center. K-12 modules being prepared for posting on DENR web site by SDGS. Publication of secondary modules planned through with SDSU.
Presentations, Exhibits and Demonstrations	General (Varies by topic)	TMDL Animal Waste Sediment Project Planning	Surface Water Source Water Ag Waste Pollution Prevention	Local, state and federal Agencies Organizations	Ongoing. Display materials purchased with 319 I&E and P2 funds. Exhibits and presentations available on variety of topics including TMDLs, project planning, GIS and P2 for use at conferences, fairs and other events as requested.
Project Coordinator Training	Watershed Project Coordinators	TMDL Project Areas	Pollution Prevention Financial Management	NRCS Conservation Districts Water Development Districts	Ongoing. Two -day project management and water quality monitoring training for local project managers held 2000 and 2001 in partnership with ND NPS Program. Next workshop planned for winter 2002/2003.

APPENDIX B -MATCHING FUNDS MATRIX

319 MATCHING FUNDS

as of 9/30/02

Grant	Federal Grant Amount	Federal Grant Expenditures thru 9/30/02	Match Required Against Federal Expend. To Date	Total Grant's Required Match	Total Match Documented
319 Implementation 89	\$1,594,000	\$1,594,000	\$1,062,667	\$1,062,667	\$1,315,016
319 Implementation 90	\$800,137	\$800,137	\$885,994	\$885,994	\$885,994
319 Implementation 91	\$655,851	\$655,797	\$437,198	\$437,234	\$437,199
319 Implementation 92	\$795,000	\$794,836	\$529,891	\$530,000	\$535,421
319 Implementation 93	\$1,090,839	\$1,090,839	\$727,227	\$727,227	\$779,175
319 Implementation 94	\$1,415,142	\$1,415,142	\$943,508	\$943,508	\$1,188,561
319 Implementation 95	\$1,699,669	\$1,699,669	\$1,133,119	\$1,133,119	\$1,154,183
319 Implementation 96	\$1,126,685	\$998,601	\$665,734	\$751,161	\$787,159
319 Implementation 97	\$1,253,790	\$1,113,624	\$742,416	\$835,902	\$1,484,877
319 Implementation 98	\$1,296,790	\$1,202,790	\$801,859	\$864,531	\$1,684,393
319 Implementation 99	\$2,791,400	\$1,252,698	\$835,132	\$1,861,025	\$953,427
319 Implementation 00	\$3,008,897	\$1,101,777	\$734,518	\$2,005,931	\$1,095,752
319 Implementation 01	\$3,267,900	\$628,557	\$419,038	\$2,178,600	\$150,737
319 Implementation 02	\$3,267,900	\$34,599	\$23,066	\$2,178,601	\$2,371
Total	\$24,064,000	\$14,383,066	\$9,941,367	\$16,395,500	\$12,454,264

